

News Release

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Landsat 5 Satellite Back in Action

Orbiter's Designed Three-Year Mission, Begins its 24th Year in Operation March 1

The earth imaging satellite Landsat 5 is once again collecting and downlinking land-image data. The satellite was temporarily taken out of service in October 2007 following a cell failure within one of the satellite's two operating on-board batteries.

USGS Flight Operations Team engineers were forced to discover ways to balance the energy demand of Landsat 5's operational and imaging instrumentation with the satellite's slightly diminished energy storage capacity. The Team's solution was to reconfigure and align Landsat 5's image acquisition schedule and to rely more on direct power from its solar array. Additionally, schedule changes were made to limit imaging during the winter months and to resume all routine imaging over the continental U.S. from March through September. Some concessions will also be made to limit imaging over international sites.

Restoration of Landsat 5's image data collection and data transfer capability is considered essential by many federal, state and local government and civilian land and resource agency managers in managing response to wildfires, floods, hurricanes, tsunamis, earthquakes and other disasters. Since its launch on March 1, 1984, Landsat 5 has provided more than 600,000 individual images, recording clear-cutting and recovery conditions of rain forests, near- and long-term effects of the Chernobyl explosion, before-and-after records of Hurricane Katrina's impact, as well as more subtle natural and human-induced changes to the global land surface. In addition to these emergency and management applications of Landsat imagery, millions of people each day use web based mapping products supported by this and other imagery data to get where they want to go.

While the design life of Landsat 5 was only 3 years, this remarkable satellite is likely to produce imagery for a few more years. Landsat 7, launched in 1999, continues to provide the global science community with worldwide seasonal images, however, it too is operating in a slightly diminished capacity.

In an effort to ensure the continuation and improvement of global and National land imaging products and services to its users beyond the life of Landsat 5 and Landsat 7, the President

recently announced a new budget initiative to create the National Land Imaging Program (NLIP) in the Department of the Interior.

NLIP planning is underway and will be designed to ensure the continuing operational and research needs for moderate resolution and multispectral land imaging products and services are met and provided to federal and civilian users.

NLIP will be responsible for the deployment and operation of future U.S.-owned, civil operational land imaging satellites and ground system assets and will be directed to facilitate the development and promotion of future land imaging technologies, applications and services to support the growing number of users.

Real-time and recent U.S. images collected by Landsats 5 and 7 are available for viewing on the USGS EarthNow! website, and archive images from both satellites can be previewed and ordered at EarthExplorer or at the USGS Global Visualization Viewer.